

Computer Network Lab



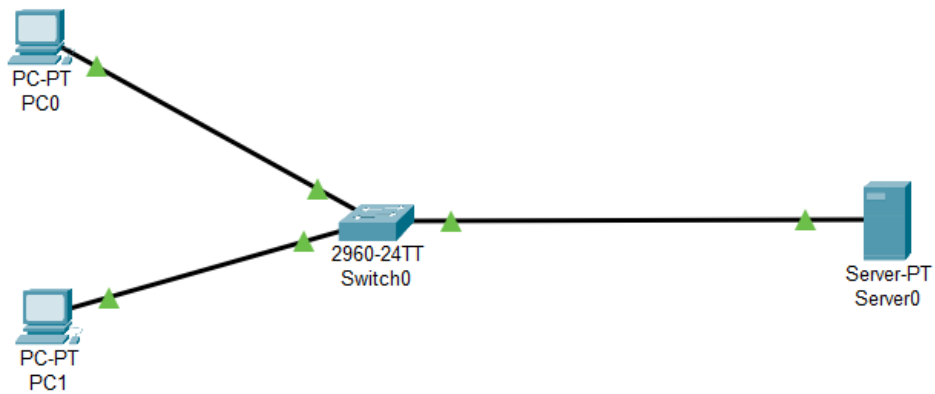
LAB WORK # 06

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Session 2020-2024

Task 1:



Dns server IP Configure

IP = 192.168.1.2
Subnet mask = 255.255.255.0
Default Gateway = 192.168.1.1
DNS server = 192.168.1.2

PC0 Configure

IP = 192.168.1.3
Subnet mask = 255.255.255.0
Default Gateway = 192.168.1.1
DNS server = 192.168.1.2

PC1 Configure

IP = 192.168.1.4
Subnet mask = 255.255.255.0
Default Gateway = 192.168.1.1
DNS server = 192.168.1.2

DNS Server :

Physical Config **Services** Desktop Programming Attributes

SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP

DNS

DNS Service ☐ On ☒ Off

Resource Records

Name Type

Address

No.	Name	Type	Detail
0	pc0	A Record	192.168.1.2
1	pc01	A Record	192.168.1.3
2	pc02	A Record	192.168.1.4

PC0

Physical Config **Desktop** Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping PC0
C:\>ping pc01

Pinging 192.168.1.3 with 32 bytes of data:

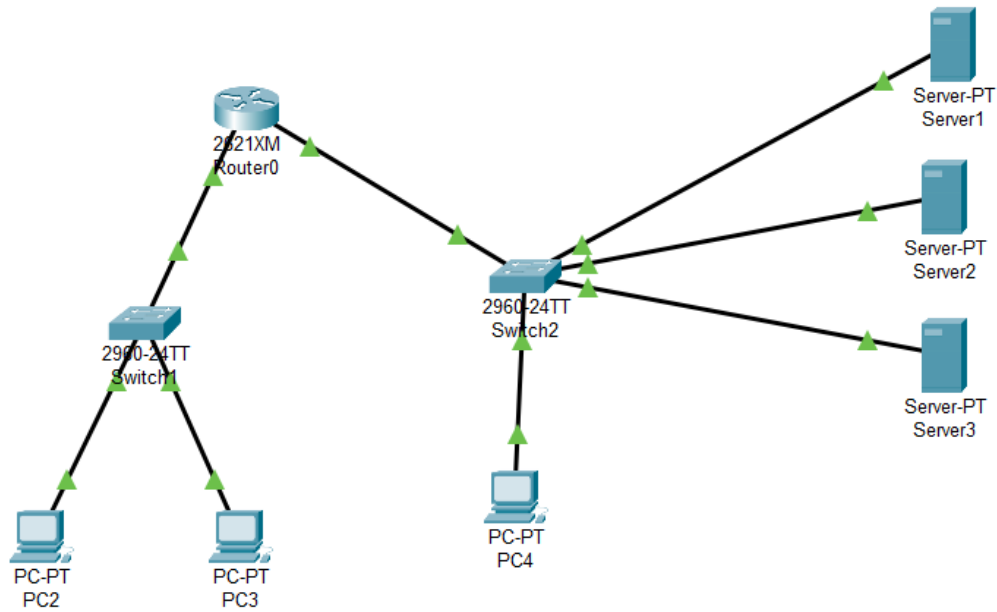
Reply from 192.168.1.3: bytes=32 time=4ms TTL=128
Reply from 192.168.1.3: bytes=32 time=4ms TTL=128
Reply from 192.168.1.3: bytes=32 time=2ms TTL=128
Reply from 192.168.1.3: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 2ms

C:\>
```

Task 2 :

Topology:



Server 3(Web Server):

Server3

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.4

Server2

Physical Config **Services** Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

InterfaceFastEthernet0Service ☒ On ☐ Off

Pool Namep2

Default Gateway192.168.2.2

DNS Server192.168.1.3

Start IP Address : 192168111

Subnet Mask: 2552552550

Maximum Number of Users : 245

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
p2	192.168.2.2	192.168.1.3	192.168.1.11	255.255.2...	245	0.0.0.0	0.0.0.0
p1	192.168.2.2	192.168.1.3	192.168.2.11	255.255.2...	245	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.1.0	255.255.2...	512	0.0.0.0	0.0.0.0

Server 2 (DNS):

Server2

Physical Config Services **Desktop** Programming Attributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IPv4 Address192.168.1.4

Subnet Mask255.255.255.0

Default Gateway192.168.1.1

DNS Server192.168.1.3

Server2

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

DNS

DNS Service

☐ On
☒ Off

Resource Records

Name

Type

A Record

Address

Add

Save

Remove

No.	Name	Type	Detail
0	web-server	A Record	192.168.1.5

Server 1:

Server1

Physical

Config

Services

Desktop

Programming

Attributes

IP Configuration

IP Configuration

☐ DHCP
☒ Static

IPv4 Address

192.168.1.6

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.3

Server1

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

File Name:

index.html

```

<html>
<center><font size="+2" color="red" Cisco Packet Tracer </font></center>
<h1>Computer Network Lab 6 </h1>
<hr> Welcome to Cisco Packet Tracer, a network simulation and learning tool for exploring networking concepts
and configurations.
</html>

```

Physical Config **Services** Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

HTTP

☒ On
 ☐ Off

HTTPS

☒ On
 ☐ Off

File Manager

	File Name	Edit	Delete
1	copyrights.html	(edit)	(delete)
2	cscoptlogo177x111.jpg		(delete)
3	helloworld.html	(edit)	(delete)
4	image.html	(edit)	(delete)
5	index.html	(edit)	(delete)

Configuring Router Now & add ip using DHCP

PC4

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

☒ DHCP
 ☐ Static

IPv4 Address 192.168.1.11
 Subnet Mask 255.255.255.0
 Default Gateway 192.168.2.2
 DNS Server 192.168.1.4

IPv6 Configuration

IP Configuration X

Interface FastEthernet0

☒ DHCP
 ☐ Static

IPv4 Address 192.168.1.12
 Subnet Mask 255.255.255.0
 Default Gateway 192.168.2.2
 DNS Server 192.168.1.4

DHCP request successful.

IPv6 Configuration

Physical Config Desktop Programming Attributes

IP Configuration

X

Interface FastEthernet0

IP Configuration

☒ DHCP

☐ Static

DHCP request successful.

IPv4 Address 192.168.1.9

Subnet Mask 255.255.255.0

Default Gateway 192.168.2.2

DNS Server 192.168.1.4

PC4

Physical Config Desktop Programming Attributes

Web Browser

X

< > URL http://www.webserver.com

Go

Stop

Cisco Packet Tracer

Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.

Quick Links:

[A small page](#)

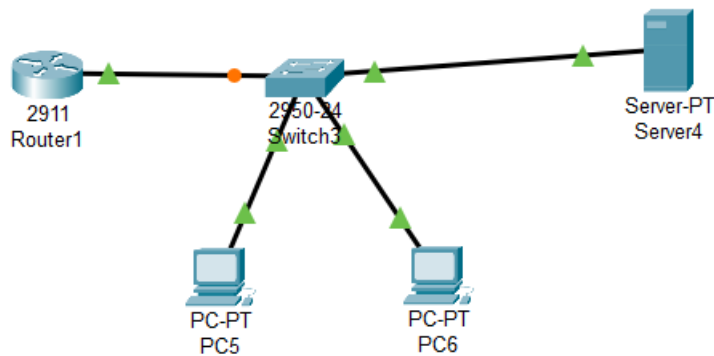
[Copyrights](#)

[Image page](#)

[Image](#)

Experiment 1

i) Topology



Router :

Router1

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/0

Port Status

On

Bandwidth

1000 Mbps

100 Mbps

10 Mbps

Auto

Duplex

Half Duplex

Full Duplex

Auto

MAC Address

0001.C9BB.D001

IP Configuration

IPv4 Address

192.168.1.10

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Server :

Server4

Physical Config Services Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0040.0B4C.BDB3

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 192.168.1.11

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address /

Link Local Address: FE80::240:BFF:FE4C:BDB3

Server4

Physical Config Services Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

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VM Management

Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name pc6 Type A Record

Address 192.168.1.13

Add Save Remove

No.	Name	Type	Detail
0	pc5	A Record	192.168.1.12
1	pc6	A Record	192.168.1.13

Server4

Physical

Config

Services

Desktop

Programming

Attributes

IP Configuration

X

IP Configuration

DHCP

Static

IPv4 Address

192.168.1.11

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

IPv6 Configuration